

Sno-Thro®

Parts Manual

Models

932045 - ST8524E

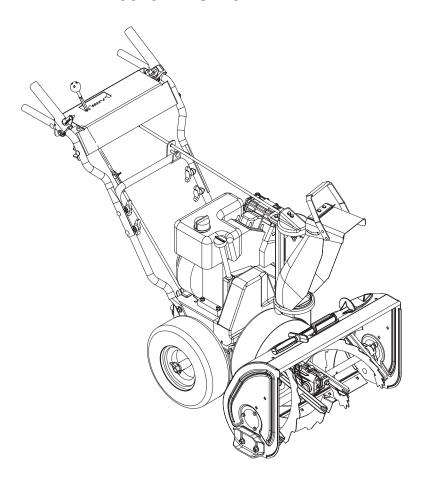
932046 - ST724E

932047 - ST5524E

932048 - ST5520

932311 - ST5520

932312 - ST7524



THE MANUAL

Before you operate your unit, carefully and completely read manuals supplied with the unit. The contents will provide you with an understanding of safety instructions and controls during normal operation and maintenance.

For your safety and the safety of others always read, understand, and follow all DANGER, WARNING, and CAUTION messages found in manuals and on safety decals.

Hardware descriptions are given in decimals.

Decimals to Fractions					
.063	1/16	.563	9/16		
.125	1/8	.625	5/8		
.188	3/16	.688	11/16		
.250	1/4	.750	3/4		
.313	5/16	.813	13/16		
.375	3/8	.875	7/8		
.438	7/16	.938	15/16		
.500	1/2	1.00	1		

SERVICE AND REPLACEMENT PARTS

When ordering replacement parts or making service inquiries, know the Model and Serial numbers of your unit and engine.

Numbers are located on the product registration card in the unit literature package. They are printed on a serial number label, located on the frame of your unit.

- Record Unit Model and Serial numbers here:
- Record Engine Model and Serial numbers here:

UNAUTHORIZED REPLACEMENT PARTS

Use only Ariens replacement parts. The replacement of any part on this vehicle with anything other than an Ariens authorized replacement part may adversely affect the performance, durability, or safety of this unit and may void the warranty. Ariens disclaims liability for any claims or damages, whether warranty, property damage, personal injury or death arising out of the use of unauthorized replacement parts.

PRODUCT REGISTRATION

The Ariens dealer must register the product at the time of purchase. Registering the product will help the company process warranty claims or contact you with the latest service information. All claims meeting requirements during the limited warranty period will be honored, whether or not the product registration card is returned. Keep a proof of purchase if you do not register your unit.

Customer Note: If Dealer does not register your product, please fill out, sign and return the product registration card to Ariens or go to www.ariens.com.

YOUR SATISFACTION IS IMPORTANT

Questions? Please follow these helpful steps:

- 1. Refer to the manuals supplied with your unit.
 - They will guide you through safe and proper operation and maintenance.
 - They contain specifications on your unit.
 - If your questions are not answered in these manuals, go to step number two.
- 2. Contact Your Dealer.

Our dealers will be happy to supply any service or advice required to keep your unit operating at peak efficiency.

A factory trained staff is available to support your equipment needs. They stock genuine Ariens parts and lubricants manufactured with the same precision and skill as the original.

If your questions are not resolved by the support staff, ask for the manager or owner.

When contacting your Dealer supply your model and serial numbers.

TO SPEED PARTS ORDERING:

- 1. Know the model and serial numbers of your unit.
- 2. Know the part number required.
- 3. Know the quantity required.
- 4. Know the part description.

Models

Domestic

Model 932045 (8524E)

8.5H.P. 24" Sno-Thro Serial No. 000101 and up

Model 932046 (724E)

7H.P. 24" Sno-Thro Serial No. 000101 and up

Model 932047 (5524E)

5.5H.P. 24" Sno-Thro Serial No. 000101 and up

Model 932048 (5520)

5.5H.P. 20" Sno-Thro Serial No. 000101 and up

International

Model 932311 (5520)

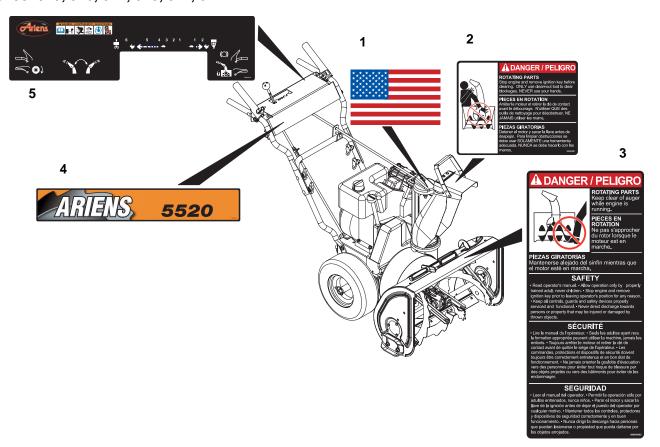
5.5H.P. 20" Sno-Thro Serial No.00101 and up

Model 932312 (7524)

7.5H.P. 24" Sno-Thro Serial No.00101 and up

TABLE OF CONTENTS

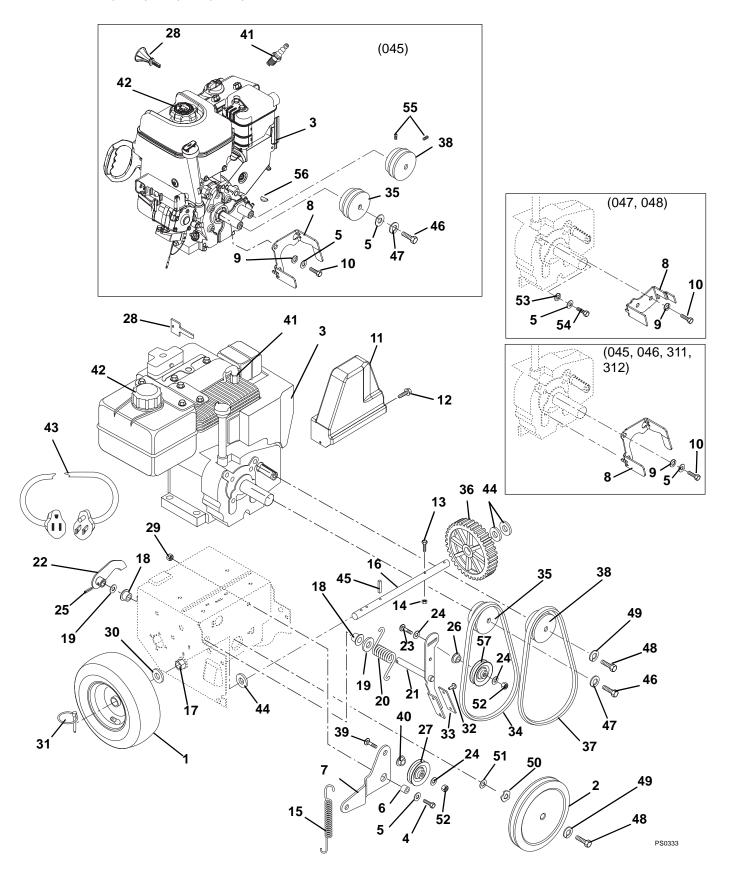
Decals 4 ENGINE AND DRIVE Engine and Belt Drive 6 Friction Drive 10 FRAME AND HOUSING Handlebars and Controls 12 Auger and Chute 14 Discharge Chute Crank 16 Gearcase and Impeller 18



PS0322

Item	Part No.	Qty.	Description
1	05305100	1	Decal, American Flag
2	08093901	1	Decal, Danger- Rotating Parts
3	08094000	1	Decal, Danger
4	08000013	1	Decal, Front Panel, ST7524 (312)
	08000015	1	Decal, Front Panel, ST5520 (048, 311)
	08000039	1	Decal, Front Panel, ST5524 (047)
	08000040	1	Decal, Front Panel, ST724 (046)
	08000101	1	Decal, Front Panel, ST8524 (045)
5	08000012	1	Decal, Dash Panel - Compact

Notes



ENGINE AND BELT DRIVE

```
Qty. Description
Item Part No.
      07100037
                        Tire/Wheel, LH 13 x 4.00-6 Pin
      07100036
                        Tire/Wheel RH 13 x 4.00-6 Pin
                    2
                        Tire, 2PR X-Trac 13 x 4.00-6
      07100038
      07100012
                   AR
                        Wheel, 4.1-6
      07105000
                   AR
                        Tube
                        Pullev-3L with Hub .625 x 8.00
      00272400
                   1
      08200037
                    1
                        Engine, 5.5HP Tecumseh OH195SA Recoil (311)
      08200015
                        Engine, 5.5HP Tecumseh LH195SP 120V (047)
                    1
                        Engine, 8.5HP Briggs & Stratton Powerbilt 120V (045)
      08200126
                    1
      08200019
                        Engine, 7HP Tecumseh OH195SA 120V (046)
      08200131
                    1
                        Engine, 5.5HP Tecumseh LH1955P Recoil (048)
                        Engine, 7.5HP Tecumseh OH195SP Recoil (312
      08200036
                    1
      05947000
                    1
                        Bolt, Hex .31-18 x .75 Grade 5
  4
                        Washer, Flat Steel .38 x .88 x .083 (046, 047, 048, 311, 312)
                    2
  5
      06435700
      06435700
                    3
                        Washer, Flat Steel .38 x .88 x .083 (045)
  6
     01035800
                    1
                        Spacer Bushing
  7
      03206900
                    1
                        Idler Arm
  8
      00457251
                    1
                        Belt Finger (046, 311, 312)
      03229051
                    1
                        Belt Finger (047, 048)
      00483451
                    1
                        Belt Finger (045)
  9
      06307400
                    1
                        Washer, Locking .312 x .097
                    1
                        Bolt, Hex .31-24 x .75 Grade 5
  10
     05947300
      00447300
                    1
                        Belt Cover
  11
  12
     07411600
                    2
                        Screw, Tapping Hex Washer Head .25-20 x .37
  13
      05953000
                    1
                        Bolt, Hex .25-20 x 1.75 Grade 8
      06529700
                        Nut, Locking Center .25-20
  14
                    1
                        Spring, Tension .05 x .44 x 3.37
  15
      08317200
                    1
                    1
                        Shaft, Axle with Pin-Lock
  16
      00289300
                    2
  17
      05521600
                        Bushing, Flange Hex .75 x .87 x .53 x 1.18
                    2
                        Bushing, Flange .50 x .625 x .50 x .75
  18
      05502100
  19
      06439600
                    2
                        Washer, Flat Steel .52 x .81 x .033
 20
                        Spring, Torsion .15 x 1.00 x 1.53
      08322000
                    1
                        Clutch Arm with Brake Pad (Includes items 32 & 33)
 21
      53205100
                    1
 22
      03231951
                    1
                        Arm, Clutch
 23
      06200008
                    1
                        Bolt-Round Head Square Short Neck .31-18 x 1.25 Grade 5
                        Washer, Flat Steel .38 x .88 x .083
 24
     06435700
 25
     05802600
                        Pin, Roll .16 x .88
                    1
 26
     01213100
                    1
                        Bearing Spacer
 27
      02457400
                    1
                        Idler (046, 047, 048, 311, 312)
      07300032
                    1
                        Idler, Flat 1.75" x .670 Plastic (045)
                        Key, Push/Pull Tecumseh (046, 047, 048, 311, 312)
 28
     07532000
                   AR
                   AR
                        Key, Push/Pull (045)
      07500012
                        Nut, Locking Center .31-18
 29
     06529800
                    1
  30
     06441400
                    2
                        Washer, Flat Steel .754 x 1.125 x .062
 31
     07053700
                    2
                        Pin-LOK .31 x 1.75
     06806700
                        Rivet, Tubular .19 x .44 (Included with item 21)
  33
     03229100
                    1
                        Brake Lining (Included with item 21)
 34 07219100
                    1
                        V Belt 4L-Section 37.88 x .56
 35 00279100
                    1
                        Sheave, Engine
  36 03226000
                    1
                        Gear
                    1
 37 07210600
                        V-Belt 3L-Section 36.75 x .406 (047, 048)
      07210700
                        V-Belt 3L-Section 34.50 x .406 (046, 311, 312)
                         V-Belt, 33.00" LG COG 3L (045)
      07200106
                    1
  38
     00279200
                    1
                        Pulley, Camshaft (046, 047, 048, 311, 312)
      03228400
                    1
                        Sheave, Camshaft (045)
  39
      06200007
                    1
                        Bolt, Round Head Square Neck .31-18 x 1.00 Grade 5 (046, 047, 048, 311, 312)
                        Bolt, Round Head Square Neck .31-18 X 1.25 Grade 5 (045)
      06200008
                    1
  40 01305900
                    1
                        Shoulder Spacer (046, 047, 048, 311, 312)
      05500102
                    1
                        Bushing, Flange .320 x .671 x .575 x .895 (045)
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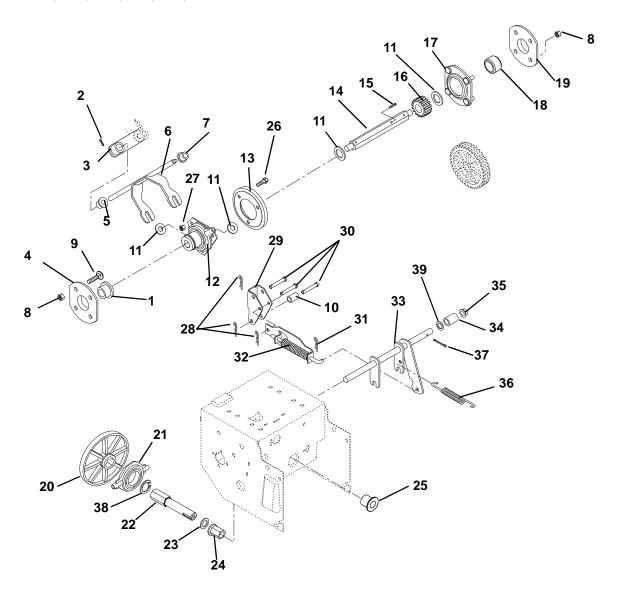
Engine and Belt Drive

Item	Part No.	Qty.	Description
41	21533400	AR	Plug, Spark (047, 148)
	21533500	AR	Plug, Spark (046, 311, 312)
	21534100	AR	Plug, Spark (045)
42	07531800	AR	Cap, Fuel (046, 047, 048, 311, 312)
	07500013	AR	Cap, Fuel (045)
43	02483100	1	Cord, Extension 120 V (045, 046, 047)
44	06444200	3	Washer, Flat Steel .755 x 1.25 x .125
45	05800300	1	Pin-Roll .188 x 1.25
46	05960300	1	Bolt, Hex .38-24 x 1.00 Grade 5 (046, 047, 048, 311, 312)
	05947300	1	Bolt, Hex .31-24 x .75 Grade 5 (045)
47	06308800	1	Washer, Locking .38 x .094
48	05952300	2	Bolt, Hex .25-28 x .75 Grade 5 (046, 047, 048, 311, 312)
	05952300	1	Bolt, Hex .25-28 x .75 Grade 5 (045)
49	06308000	2	Washer, Locking .25 x .077 (046, 047, 048, 311, 312)
	06308000	1	Washer, Locking .25 x .077 (045)
50	06400007	1	Washer, Wave .69 x .84 x .011
51	06400009	1	Washer, Thrust .625 x 1.00 x .03
52	06500011	2	Nut, Locking Center Jam .31-18
53	06307400	1	Washer, Lock .312 x .097 Heavy (047, 048)
54	05947300	1	Bolt, Hex .31-24 x .75 Grade 5 (047, 048)
55	06005500	2	Screw, Set .31-18 x .38 Socket Head (045)
56	06601500	1	Key, Woodruff .125 x .625 x .250 SAE 5 (045)
57	02457400	1	Idler

Notes

FRICTION DRIVE

Model 932045, 046, 047, 048, 311, 312

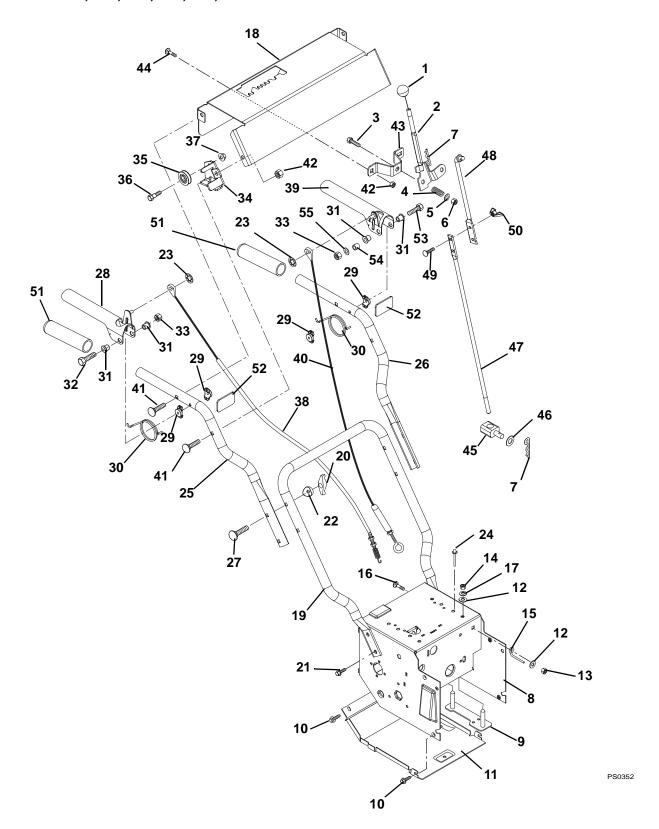


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Item	Part No.	Qty.	Description
1	05511000	1	Bushing, Flange .50 x .75 x .63 x .94
2	05802600	1	Pin, Roll .16 x .88
3	00397900	1	Weldment, Speed Control Arm
4	53211500	1	Flange and Bushing (Includes Item 1)
5	05502100	1	Bushing, Flange .500 x .625 x .500 x .750
6	03231700	1	Fork, Speed
7	05514500	1	Bushing, Flange .33 x .44 x .44 x .56
8	06530600	8	Nut, Locking Dual Face 10-24
9	06214200	4	Bolt, Round Head Square Neck 10-24 x .38 Grade 2
10	03242100	1	Spacer, .325 x .625 x .455
11	06439200	4	Washer, Flat Steel .51 x 1.00 x .062
12	03235300	1	Shift Carrier

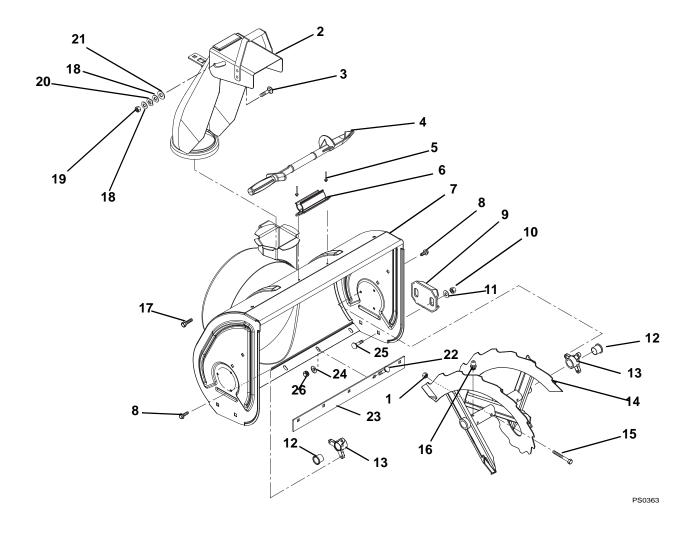
FRICTION DRIVE

Item	Part No.	Qty.	Description
13	03248300	1	Friction Disc
14	00428000	1	Hex Shaft
15	05804700	3	Pin, Roll .125 x .88
16	02201100	1	Pinion
17	00308500	1	Bearing, Flange
18	05435200	1	Bearing, Ball .437 x 1.375 x .437
19	03226900	1	Bearing, Flange
20	03201100	1	Friction Plate
21	03225900	1	Bearing Assembly
22	00428600	1	Shaft, Spindle - Compact Snow
23	06400009	1	Washer, Thrust .625 x 1.0 x .03
24	05512000	1	Bushing, Flange .63 x .88 x 1.75 x 1.19
25	05512100	1	Bushing, Flange .88 x 1.25 x .75 x 1.50
26	05947900	3	Bolt, Hex .25-20 x .50 Grade 5
27	06529700	3	Nut, Locking Center .25-20
28	06701900	3	Pin, Hair Internal .06 x .18 x .77
29	03248000	1	Bracket, Traction Arm
30	06714700	3	Pin, Clevis .243/.248 x 1.38
31	06713500	1	Pin, Hair Internal .08 x .18 x 1.18
32	53205500	1	Assembly, Traction Clutch
33	03221100	1	Clutch Fork
34	03231500	1	Spacer .50 x .75 x .32
35	01208600	1	Cap .50 Rod
36	08314100	1	Spring, Tension .06 x .44 x 1.56
37	06707100	1	Pin, Cotter .12 x 1.0
38	05704300	1	Ring, Retaining External 1.25 x .05
39	06441900	1	Washer, Flat Steel .53 x 1.06 x .095



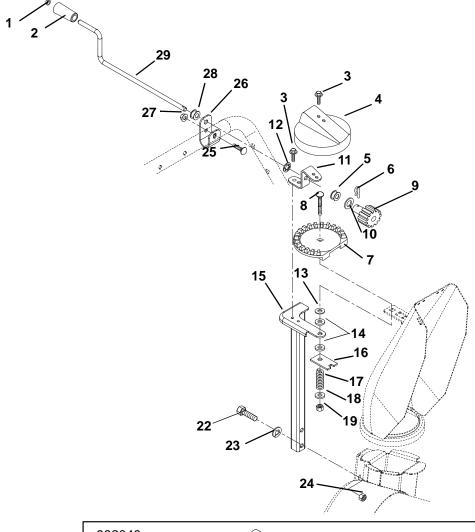
HANDLEBARS AND CONTROLS

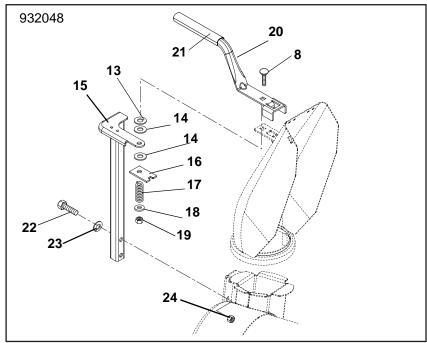
Item	Part No.	Qty.	Description
1	07533500	1	Knob, Ball-Black 1.47, .375-16
2	03247900	1	Weldment, Shift Lever
3	05963300	1	Bolt, Hex .38-16 x 2.00 Grade 5
4	08335700	1	Spring, Compression .13 x .78 x 1.25
5	06435900	1	Washer, Flat Steel .44 x 1.00 x .083
6	06529600	1	Nut, Locking Center .38-16
7	06713500	2	Pin, Hair Internal .08 x .18 x 1.18
8	00397359	1	Frame, Compact Snow
9	00188400	2	Strap, Engine Bolt Weldment
10	07411600	4	Screw, Tapping .25-20 x .37 Hex Washer Head
11	03232459	1	Cover Bottom
12	06435700	1	Washer, Flat Steel .38 x .88 x .08 (046, 047, 048, 311, 312)
4.0	06435700	2	Washer, Flat Steel .38 x .88 x .08 (045)
13	06529800	1	Nut, Locking Center .31-18
14	06529200	4	Nut, Hex .31-18
15	03236300	1	Belt Finger Lower
16	06220800	1	Bolt-Round Head Square Short Neck .31-18 x .75 Grade 5
17	06307400	4	Washer, Locking .31 x .10 Heavy
18	53214300	1	Control Panel with Decal
19	00426951	1 4	Handlebar, Lower
20 21	07531700 07028500	4	Knob, Wing .31-18 Bolt Serrated Hex Flange Washer Head .38-16 x .75 Grade 5
22	07500005	4	Spacer, Handlebar
23	05717600	2	Ring, Retaining, External .25 x .010
24	06800001	2	Rivet-Pop, .187 x .45 Dome Aluminum
25	00427051	1	Handlebar, Upper RH
26	00427051	1	Handlebar, Upper LH
27	06221600	4	Bolt, Round Head Square Neck .31-18 x 2.25
28	00398351	1	Paddle, Clutch - RH Compact
29	05500040	4	Bushing, .266 x 1.62 x .50
30	08300026	2	Spring, Torsion
31	00399300	4	Bushing, Flange
32	05961600	1	Bolt, Hex .25-20 x 2.50 Grade 5
33	06530900	2	Nut, Jam Nylon .250-20 With Nylon Locking Type Insert
34	00398700	1	Bracket, Cable Mount
35	07300012	1	Pulley, Black Nylon
36	07000021	1	Bolt, Shoulder
37	06529700	1	Nut, Locking Center .25-20
38	06900022	1	Cable, Auger
39	00398151	1	Paddle, Clutch - LH Compact
40	06900023	1	Cable, Traction
41	06200009	4	Bolt, Round Head Square Extra Long Neck .31-18 x 1.50
42	06543100	6	Nut, Locking Top Flange .31-18
43	00398451	1	Bracket, Shift Mount
44	06212200	2	Bolt, Round Head Square Neck .31-18 x .62
45	00386700	1	Pivot, Shift Rod
46	06437300	1	Washer, Flat Steel .281 x .62 x .065
47	00423300	1	Rod, Shift Lower
48	00399700	1	Rod, Shift Upper
49	06219900	2	Bolt, Round Head Square Neck .25-20 x .75
50	06537500	2	Nut, Locking Wing .25-20
51	07518700	2	Handle Grip
52	00446700	2	Bumper Pad
53	05965300	1	Bolt, Hex .25-20 x 3.25
54	00589800	1	Bushing, Sleeve .266 x .750 x .750
55	06437300	1	Washer, Flat, Steel .281 x .62 x.065



AUGER AND CHUTE

Item	Part No.	Qty.	Description
1	06529700	2	Nut, Locking Center .25-20
2	53214400	1	Chute, Discharge, Compact Snow
3	06220800	1	Bolt, Round Head Square Short Neck .31-18 x .75
4	00170200	1	Device, Snow Cleanout
5	06813600	2	Rivet-Pop .187 x .45 Stainless Steel Dome FBF64
6	00170300	1	Mount, Snow Cleanout
7	53214500	1	Weldmemt, 24" Blower Housing (045, 046, 047, 312)
	53214600	1	Weldment, 20" Blower Housing (048, 311)
8	07412000	6	Screw-Tapping .25-20 x .50
9	02483859	2	Runner, Double Flange
10	06529600	4	Nut, Locking Center .38-16
11	06435700	4	Washer, Flat Steel .38 x .88 x .08
12	05500012	2	Bushing-Flange, Nyliner .75" I.D.
13	00275200	2	Bushing, Rake Shaft
14	53213100	1	Rake Right Hand 24" with Zerks (Includes Items 16) (045, 046, 047, 312)
	53213200	1	Rake Left Hand 24" with Zerks (Includes Items 16) (045, 046, 047, 312)
	53212300	1	Rake Right Hand 20" with Zerks (Includes Items 16) (048, 311)
	53212400	1	Rake Left Hand 20" with Zerks (Includes Items 16) (048, 311)
15		2	Shear Bolt with Nut (Includes Items 1)
16	07061300	2	Zerk, Fitting .25 x .125
17	07412900	4	Screw, Tapping .38-16 x .50 Hex Washer Head
18	06437200	2	Washer, Flat Steel .34 x .69 x .065
19	06529800	1	Nut, Locking Center .31-18
20	01320200	1	Wave Washer
21	06416800	1	Washer, Plastic .39 x .88 x .06
22	06222000	5	Bolt, Round Head Square Neck .31-18 x .50 Grade 5
23	00271459	1	Scraper Blade 24" Compact (045, 046, 047, 312)
	00396659	1	Scraper Blade 20" Compact (048, 311)
24	06437200	5	Washer, Flat Steel .344 x .688 x .065
25	06200004	4	Bolt, Round Head Square Short Neck .38-16 x .75
26	06529800	5	Nut, Locking Center .31-18



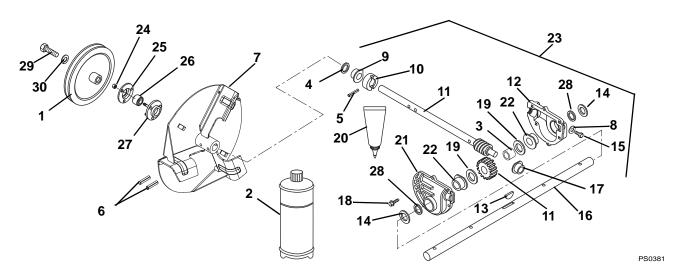


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DISCHARGE CHUTE CRANK

Item	Part No.	Qty.	Description
1	01019800	1	Cap, .38 Rod (045, 046, 047, 311, 312)
2	07500001	1	Knob, Chute Crank (045, 046, 047, 311, 312)
3	07412000	4	Screw, Hex Washer Head Self Tapping .25-20 x .50 (045, 046, 047, 311, 312)
4	03223000	1	Cover, Gear (045, 046, 047, 311, 312)
5	05500021	1	Bushing, Polyliner (045, 046, 047, 311, 312)
6	06714500	1	Pin, Spring Clip (045, 046, 047, 311, 312)
7	03222900	1	Gear, Chute (045, 046, 047, 311, 312)
8	06224400	1	Bolt, Round Head Square Neck .38-16 x 2.50 Grade 5
9	53214700	1	Bracket with Pinion Gear (Contains Items 5, 10, 11, 12) (045, 046, 047, 311, 312)
10	06400009	1	Washer, Thrust .625 x 1.0 x .03 (045, 046, 047, 311, 312)
11	00443551	1	Bracket, Pinion Gear (045, 046, 047, 311, 312)
12	03224300	1	Push Nut (045, 046, 047, 311, 312)
13	06439300	1	Washer, Flat Steel .38 x 1.50 x .062
14	01123800	2	Friction Washer
15	00396751	1	Weldment, Pedestal Chute Mount
16	00398000	1	Friction Plate
17	08320900	1	Spring, Compression .19 x .56 x 1.62
18	06436200	1	Washer, Flat Steel .41 x .81 x .065
19	06529600	1	Nut, Locking Center .38-16
20	00427451	1	Handle, Chute Rotation (048)
21	00345700	1	Grip, Chute Handle, Orange (048)
22	05958500	2	Bolt, Hex .38-16 x 1.75
23	06308800	2	Washer, Lock .38 x .094
24	06542000	2	Nut, Locking Top Flange .38-16
25	06220200	1	Bolt, Round Head Square Neck .31-18 x 1.75 (045, 046, 047, 311, 312)
26	00398551	1	Bracket, Crank Support (045, 046, 047, 311, 312)
27	06543100	1	Nut, Locking Top Flange .31-18 (045, 046, 047, 311, 312)
28	05500020	1	Bushing, Polyliner 322-C (045, 046, 047, 311, 312)
29	00423400	1	Rod, Chute Crank (045, 046, 047, 311, 312)

GEAR CASE AND IMPELLER



Item	Part No.	Qty.	Description
1	00187000	1	Pulley, 4L with Hub .75 x 8.50
2	0008000	1	Ariens 16 oz. Bottle of L2 Lube
3	05531200	1	Bushing, Sleeve .755 x 1.500 x .442
4	05600004	1	Seal, Oil .748 x 1.378 x .276
5	05804900	1	Pin, Groove .19 x 1.25 Type E
6	05803700	2	Pin, Roll .25 x 1.75
7	00426651	1	Weldment, Impeller 12" 3 Blade
8	06442500	1	Washer, Fiber .44 x .66 x .032
9	05511200	1	Bushing, Flange .75 x 1.00 x .75 x 1.25
10	00272100	1	Thrust Collar .75 I.D.
11	53212500	1	Shaft & Worm Gear Assembly
12	00291100	1	Gear Case Casting, Machined Left Hand
13	06609300	1	Key, Woodruff .19 x .63 Hardened #61
14	06439000	2	Washer, Flat Steel .81 x 1.50 x .14
15	07417000	1	Screw, Tapping .38-16 x .75 Rolok
16	00263000	1	Shaft, Rake 24" (045, 046, 047, 311, 312)
	00260500	1	Shaft, Rake 20" (048, 311)
17	05520600	1	Bushing, Flange .50 x 1.00 x .75
18	07412400	6	Screw, Tapping Hex Washer Head .25-20 x 1.00
19	06441500	2	Washer, Flat Steel .755 x 1.375 x .062
20	00031700	1	Loctite Gasket 518
21	00291200	1	Gear Case Casting, Machined Right Hand
22	05531100	2	Bushing, Flange .75 x 1.13 x .50 x 1.50
23	53212700	1	Gear Case Assembly- 24" (contains 3-5,8-13,15-22,28) (045, 046, 047, 311, 312)
	53212600	1	Gear Case Assembly- 20" (contains 3-5,8-13,15-22,28) (048, 311)
24	06529700	3	Nut, Locking Center .25-20
25	01014200	1	Bearing Flange
26	05406300	1	Bearing, Ball .75 x 1.75 x .50
27	00428700	1	Bearing, Flange
28	05618900	2	Seal, Oil .75 x 1.375 x .250
29	05947300	1	Bolt, Hex .31-24 x .75 Grade 5
30	06307400	1	Washer, Locking .312 x .097 Heavy



Ariens Company 655 West Ryan Street P.O. Box 157 Brillion, WI 54110-0157 920-756-2141 Fax 920-756-2407 www.ariens.com